

Promoter's Address

*Delivered at the Medical Graduation
Ceremonial of the University of Edinburgh on the
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BY

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PROMOTER'S ADDRESS.

FELLOW-GRADUATES IN MEDICINE,—Continuing a custom which has been repeated for many years on one of the first days of August, I now heartily congratulate you on your Academic promotion. In the name of the University, and even more particularly in that of my colleagues in the Faculty of Medicine, I express most cordially the hope that the Degrees you have won by your exertions may enable you to realise many of those expectations which have sustained you during the years of preparation.

I congratulate the Bachelors of Medicine and Masters in Surgery on their entrance into a profession which affords occupation for the highest ambition, not only in the mere desire to gain a position of honour and distinction, but also in the yet more laudable ambition to make the best use for the good of our fellow-men of the knowledge which has been acquired. I congratulate the Doctors of Medicine on the advancement they have now gained, and on the greater opportunities which it will afford them of continuing that work of usefulness upon which they have already entered. I trust I may be allowed to express an equally earnest hope for their welfare to the Graduates in Arts, Science and Law, whose promotion has lent an additional interest to to-day's proceedings. It would ill become me to add anything to the words with which the Dean of the

Faculty of Law has introduced the gentlemen who have received Honorary Degrees, but this I may say, that, on an occasion such as this, the presence among us as the recipients of the highest honours of the University, of men who have achieved distinction in Law, Science, or Letters, cannot fail to have a beneficial influence upon the younger graduates by stimulating endeavour and encouraging laudable ambition. I wish, indeed, it were the rule, rather than the exception, that our medical graduation ceremonials should thus be graced ; and it is probable that in the future this wish will be more frequently realised, in the case at least of those eminent in Medicine and Surgery and the relative Sciences, as a new Ordinance of the Universities Commission has rendered it more easy to effect this than it has previously been.

As social honours are not frequently conferred upon members of our profession, it is all the more gratifying when one of ourselves is the recipient. The recognition of Sir Thomas Grainger Stewart's merits by Her Majesty has given much satisfaction to his students and colleagues, and we wish him a long possession of the new title which he is so well able to adorn. It may be worthy of remark that, for the first time in its history, the Faculty of Medicine is now in possession of three professors upon whom Her Majesty has conferred the honour of knighthood.

It must always be with a grave sense of responsibility that one of your teachers addresses you on an occasion so significant as the present. Freed from the restraints and pleasures of your student life, you are now about to enter upon your life-work with its unknown successes and vicissitudes. For this work you have received such

preparation as we can give you in the sciences on which your art is founded, and in your initiation into its practice. In both departments the University can claim much for its methods of teaching. At a time when the training of the practitioners of Great Britain was for the most part restricted within the limits of mere professionalism, this University had widened the basis of education by requiring instruction in science as an antidote to the narrowing influence of a too restricted attention to purely professional subjects. The great value of this instruction, as a preparatory intellectual training and as a means of elevating the standard of professional culture, has now been fully acknowledged by its adoption both by the older and the newer Universities, and, on the initiation of the General Medical Council, by all the Medical Licensing Authorities of the kingdom. On the purely practical side of medical education, Edinburgh has also been placed in an exceptional position of advantage. Early in the eighteenth century the genius of Cullen gave to practical medicine a philosophical interest which it has never lost in this University ; but it was left to Bennett to inaugurate a system of instruction in Clinical Medicine, and to Syme one in Clinical Surgery, which exceeded in efficiency the teaching of these subjects elsewhere in Great Britain, and which their successors have done their best to improve.

But, Gentlemen, while much of your future depends upon the training you have undergone, much, even more, depends upon yourselves. It has been said that "our bodies are our gardens, to the which our wills are the gardeners, so that if we will plant nettles, or sow lettuce, set hyssop, and weed up thyme, supply it with one gender of herbs or distract it with many, either to have

it sterile with idleness, or manured with industry, why, the corrigible authority of this lies in our wills." Assuming, as I confidently do, that you do not intend to sow nettles, but rather lettuce and thyme, so as to obtain in the future an abundant harvest of the necessities, and even of the highest luxuries, of life, much still remains before that harvest can be garnered in its full expectation.

In that future to which you are now being promoted, many of you will encounter the successes which we all hope for; and, however "*spes incerta futuri*," it is well that your first entrance into active life should be brightened and encouraged by the expectations that are so natural to youthful enthusiasm. We cannot all of us, unfortunately, realise our expectations. Too often

"The ample proposition that hope makes
In all designs begun in earth below
Fails in the promised largeness."

We can all, however, in whatever condition of life we are placed, derive the highest satisfaction and pleasure from endeavouring to realise the expectations of a life in which our ideal is the performance, to the best of our ability, of whatever duties may fall to us. And I do not know any duties from which this satisfaction can be obtained in a higher degree than those to which you are about to devote—I would almost say consecrate—yourselves. We are apt, indeed, when engrossed in the difficulties of our work, when our minds are fully occupied with the details of the means by which results are being obtained—we are apt to forget that that work, in its successful and faithful performance, is one which not only confers great benefit upon our fellow-creatures, but

also is capable of affording to the doer some of the highest gratifications which humanity is entitled to expect. I am persuaded that you will acknowledge the truth of this when I remind you that your promotion places it in your power—indeed, makes it your imperative duty—to increase the happiness and usefulness of others by removing physical and mental disablement and distress, by conferring upon your country all the benefits that are implied in an improved sanitation, and by curing disease and thereby prolonging lives valuable to the possessors, and often even more valuable to others.

In reference to this word “cure” you will apprehend that it should not be used only in its restricted sense, as implying what is no doubt one of our highest functions, but which, in a great number of cases, still remains the mere aim and hope of medicine. In this restricted sense it is too often alone understood, and has thus become the foundation of the reproach that medicine is an uncertain art. No doubt the sciences on which its practice is based are not yet perfect, its principles do not always rest on established grounds, and we must in the meantime often trust to the uncertainties of empirical knowledge. Although these conditions do not justify the attachment of reproach to medicine any more than to other professions and occupations involving complicated circumstances, in which uncertainty is at least equally present, they should not be overlooked by us. While they should cause us to be modest in our pretensions, and to avoid all self-satisfied ostentation, they should also lead us earnestly to recognise that on each the duty is incumbent of doing whatever he is able to advance knowledge and increase the resources of medicine. Above all, do not allow uncertainties

and imperfections to lead to the adoption of an attitude of *laissez-faire*, or, even worse, of cold scepticism on your part. Whatever the imperfections may be, they cannot constitute a reason for neglecting, or even for being contented with, what has been acquired. It is almost unnecessary to remind you, with your recent experiences before boards of examiners, that no man knows all that is known regarding medical science and art.

“There are more things in heaven and earth, Horatio,
Than are dreamt of in your philosophy.”

As Descartes has written, “I am sure that there is no one, even among professional men, who will not declare that all we know is very little as compared with that which remains to be known, and that we might escape an infinity of diseases of the mind, no less than of the body, and even perhaps of the weakness of old age, if we had sufficient knowledge of the causes, and of all the remedies with which nature has provided us.”

The word “cure” also implies the care, the charge, the oversight of patients. In this wider acceptance of the word, which covers also the narrower acceptance, your mission is actually to *cure* every one who is placed under your professional charge. Even when you are unable entirely to overcome disease by your treatment, you have still a useful and even a noble work to perform in skilfully applying the resources of your art to mitigate suffering and prolong life ; and, may all of you learn by the experience of faithfully and affectionately performed duty, to confer upon your patients the inestimable comforts of confidence in your capacity, and of that encouragement in distress which can be obtained only

from the visits of the practitioner, skilful in resource and well informed of the condition of the sufferer.

But, Fellow-Graduates, while I have thus spoken of your relations to your patients, let me also say a few words regarding your relationship to your fellow-practitioners. It is because we must recognise that there exist difficulties and dangers specially inherent to the professional life of a medical practitioner, and, therefore, in some respects outside the sphere of general ethics, that I venture to make a few remarks on this subject. In this professional life, a keen competition is to be found on the one side, and, on the other, not only a public necessarily only imperfectly informed in medical subjects, but also a profession dealing with subjects regarding which knowledge is often uncertain. It is not to be wondered at, therefore, that differences of opinion should frequently arise amongst practitioners; but while we are entitled to differ, and even to dispute, such differences cannot be an excuse for unfriendliness, and much less for endeavouring to disparage those who differ from us. Competition, however keen, may exist with a full recognition of what is good and creditable in others, and with an unflinching resolution to avoid trading upon the ignorance of an imperfectly informed public, either for one's own advantage or for the disadvantage of a fellow-practitioner. Competition, however keen, is not an excuse for the prevailing evils of self-advertisement, to which, I fear, must be attributed—when not explainable by youthful and still immature enthusiasm—a portion of the *cacoëthes scribendi* which is burdening medical literature and which frequently is not far removed from the quackery which obtrudes itself in the advertisements of vulgar charlatans. Both appeal to

ignorance, and both endeavour to benefit the individual on false pretences.

It is, no doubt, in the department of therapeutics that shallow pretensions have for centuries been, and still continue to be, more boldly and skilfully advanced than in any other, not even excepting surgery. The reasons for this are not difficult to find. Suffering humanity is naturally anxious for relief, and only too prone to believe assertions dogmatically expressed and accompanied with explanations obscured by a bold misuse of scientific phraseology. These are, however, the artifices of mere charlatans ; but I am not sure that our profession is altogether blameless in this matter. The keen competition and the desire for novelties, which remain as prevalent now as when the Athenians of old clamoured for new things and new doctrines, supply temptations the effect of which may not infrequently be observed in the application of electricity, galvanism, and massage to the treatment of many diseases ; in the farce which is too frequently acted of enjoining a special diet as a means of bodily salvation ; and in the readiness with which any new remedy at once becomes fashionable, provided its recommendation is accompanied with the assertion that its administration in a few cases was followed by the most marvellous benefits.

It must be admitted that at no previous time in the history of medicine have the temptations been so powerful to yield to the last of these forms of professional charlatanism. The advance of organic chemistry has led to the production of an almost unlimited number of substances of complex constitution ; and as probably no substance is incapable of

producing some perturbation in the physiological conditions of the body, and thus of modifying some of the conditions of disease, it is not remarkable that enterprising commercial therapeutists should within the last two or three years have recommended to our notice more than a hundred new products, whose aggregate application, one would fancy, should already "have made nature immortal, and death play for lack of work." But, gentlemen, Shakespeare has also said :

"O, mickle is the powerful grace that lies
In herbs, plants, stones, and their true qualities."

Of how many of these substances can it be said that we know the true qualities? The determination of the mere action of any one of them would require at least six months' study by a skilled investigator. The establishment of its therapeutic uses, apart from the knowledge obtained from this study, by relatively crude and unsatisfactory observations in disease, could not be accomplished within the lifetime of a generation. In these circumstances there is much wisdom in the remark of a witty Frenchman, "Make haste to use them while they cure."

It is in some respects specially unfortunate that this haste to use new remedies should constitute one of the most conspicuous characteristics of modern medicine. For it is also within modern times, within the last twenty or thirty years, that one of the most important and encouraging developments of medical science has occurred. I mean the recognition and application of the fact that all remedies have definite localities of action, within which their qualitative effects are produced. The treatment of disease by remedial substances has thus been brought into association with one of the

greatest developments of pathology—with the doctrine that all diseases are the results of changes in definite localities—which was enunciated in the middle of the last century by Morgagni in his treatise “*De Sedibus Morborum*,” and first gave to clinical medicine its real importance.

There is another direction in which a remarkable impetus has been given to practical medicine and surgery. It is stated along with those I have mentioned in the following quotation from Professor Huxley:—“The search for the explanation of diseased states in modified cell-life, the discovery of the important part played by parasitic organisms in the etiology of disease, the elucidation of the action of medicaments by the methods and data of experimental pharmacology, appear to me to be the greatest steps that have ever been made towards the establishment of medicine upon a scientific basis.” By the discoveries of bacteriology, Morgagni’s doctrine of the localisation of disease has received a completeness which it otherwise lacked ; for bacteriology has supplied the explanation of many of the causes of diseased changes in definite localities. In this new development of medicine—with which the names of Pasteur, Koch, and Lister will always be associated—progress has been facilitated by the previous work of the pharmacologist, which has indicated the methods by which the action of bacterial toxins can best be determined, and, by the previous establishment of pharmacological antagonism—of the capability of certain medicinal substances to prevent death from being produced by toxic doses of others—has suggested the reasonableness and indicated the limitations of a toxin antagonism between bacterial toxins themselves, as well as between

bacterial toxines and remedies in the ordinary acceptation of the term. Thus, Gentlemen, we have been brought to the boundaries of a vast and hitherto undreamt-of territory, whose cultivation will speedily enrich medical practice with further resources for the prevention, and even for the actual cure, of disease.

At this period in the history of our University, when many changes are being produced in our organisation by the abundantly productive labours of the Universities Commission, it may serve a useful purpose to inquire how far we are prepared to take a creditable and efficient part in the exploration and cultivation of this rich territory, or in advancing the sciences on which the progress of medicine is dependent. We are entitled to contemplate with gratification the early appreciation by our University of the great value of scientific training. To this cause, to the earnestness and ability with which scientific as well as practical instruction were combined in our system of education, may be attributed much of the great success which has been attained. This success, however, has naturally resulted in a concentration of effort to attain high excellence in teaching. Whatever good original work has been done—and such work has happily contributed not a little to the increase of knowledge in the theses of our Doctors of Medicine, in the valuable investigations of our graduates, and in many researches of the past, and, I may be allowed to say, even of present professors—this description of work has not constituted so prominent a feature in our system as the work of diffusing already acquired knowledge.

In former times, indeed, the relationship between science and medical practice was by no means so close

as it has now become, nor had science sufficiently advanced to indicate many directions to which investigation could with advantage be prosecuted. These conditions no longer exist, and it has become evident that no university can now claim to be "a light of the world" unless it can abundantly produce, as well as burn, the oil which is required to dispel darkness. It has become evident that the time has arrived when our University should so far reorganise her system as to adopt the prosecution of research as a recognised and indispensable part of her work.

Impressed with these considerations, the Faculty of Medicine have, some months ago, prepared a scheme by which research-work might be fostered in the laboratories of the University by the workers being freed from all pecuniary outlay. This has been followed by two important Draft Ordinances of the Universities Commission. The first of them contains the provision I have mentioned, and also gives powers for the foundation of research scholarships, to which stipends may be attached; the second Draft Ordinance increases still further the inducements for engaging in research by placing it within the reach of investigators to obtain the high degree of Doctor of Science as a reward for the diligent and successful prosecution of research.

I do not think that the importance of these provisions can be exaggerated. They constitute the great Reform Bill of the University, overshadowing in their probable far-reaching effects the numerous changes in our University organisation which have succeeded each other during the last three years. That they have been so long delayed may, I think, be explained, not only by the reasons I have already stated, but also by the cir-

cumstances incidental to the lives of many of the Professors in the Faculty of Medicine. One result of these circumstances has been that the duties imposed upon them, while in some of their aspects most pleasant and agreeable, are in others of them of an exacting nature. From early October until the beginning of August they are engaged, with almost no respite, in University duties. Beyond the imperfect hints obtained during conversation with visitors from other universities, and the imperfect indications derived from medical literature, no opportunity is given to them for learning what is being done elsewhere ; and if, in the two months of freedom from necessary work, they strive to recruit their exhausted energies by travel in such foreign countries as can be visited during the tropical heat of Autumn, they find the doors of nearly all the seats of learning closed, and their laboratories for the most part deserted.

Some of us have had the rare opportunity of breaking through these restrictions, which are only too apt to engender a narrow provincialism, during the meeting in Spring of the last International Medical Congress. Italy, which a few centuries ago had enjoyed the reputation of being the great European centre of knowledge, whose universities of Salerno, Bologna, Pisa, Florence, and Naples, became the models for similar institutions throughout Europe, and which possessed such teachers as Malpighi, Valsalva, Scarpa, Galvani, Fallopio, and Morgagni, had afterwards lapsed into a condition of scientific as well as of political inertness. We have, perhaps, been too apt to consider that this scientific inertness has not been entirely recovered from. The frequent recent publication of good work has not been altogether sufficient to remove this impression. A visit

to the Universities of Italy, therefore, comes on one almost as a revelation. Not only is there found great activity in teaching, with students of medicine in some cases even as numerous as those of Edinburgh, but there are also enthusiastic investigators, laboratories equipped by the State and by private generosity with every requirement for research, and palatial hospitals—models for imitation in all that concerns the treatment of disease and the improvement of medical practice. Under such able workers as Duranti, Mosso, Baccelli, Bizzozero, Giacosa, Marchiafaba, Semmola, Cantani, and many others, Italian medicine is striving, with already a large measure of success, to reproduce the traditions of her golden age.

But Italy does not occupy, in her present position of scientific activity, any exceptional place in Continental Europe. We all greatly appreciate the signal advances now being made in medicine by the original investigators of Germany and France; and the Universities of Holland, Switzerland, Russia, and Belgium, are not far behind in this honourable contest.

It is perhaps instructive to note that this *renaissance* in Italy has been produced, not by a spontaneous accident, but by a deliberately planned intention. Able Italian professors and graduates were sent to foreign universities in order that they should learn what was there being taught, and familiarise themselves with the apparatus and organisation for advancing medical science; and all that was best in the valuable information that was thus obtained was introduced into the Italian universities. May we not learn a further lesson from this history? In order to avoid any danger of our University lapsing into the inertness of provincialism, or

failing to maintain her position as the metropolitan medical university of Great Britain, it might, with all deference, be suggested that the medical professors—or at least those of them whose duties are of the exacting nature which I have described—should at stated intervals, be relieved of these duties for a period of six or of three months, in order that they might familiarise themselves with the work being done in their respective departments in those foreign universities where this work has been most highly developed. Reports of great value would thus be received, and the University would also be repaid by the great increase in the usefulness of the professors.

In order to facilitate the work of investigation within the University by training men for research, as well as to increase the diffusion of knowledge in directions where special advancement has been made, proposals are now under discussion to institute additional lectureships. Those in the meantime proposed are, in the more purely scientific branches of medicine, on the subjects of Regional Anatomy, Physiological Chemistry, Experimental Pharmacology, and Pathological Bacteriology; and, in practical medicine and surgery, on Fevers, Diseases of the Skin, and Rhinology and Otology. I am glad to believe that there is every probability of these lectureships being instituted at an early date. They are to be regarded, however, only as instalments of a group which in the course of years must be added to, and some of the members of which must be further developed. The importance of their institution is manifest when it is apprehended that one of the results will be that the great modern subject of Bacteriology will at length receive special and definite recognition in this University.

I fully believe, Gentlemen, that by such means the University, notwithstanding the increasing strength of many competing rivals, will be able to justify the expectation that she will maintain her high position as a medical school by adding to her reputation as a teacher of already acquired knowledge the equally necessary reputation of being a producer of new knowledge. It is a worthy ambition to strive for this result. The position of our University is still a unique one in its success. Her past history may be contemplated with satisfaction. She has justly been regarded as the metropolitan University in things medical of our country ; her influence for good has been felt amongst all English-speaking communities ; she has been the founder of schools and the model for imitation in countries situated in each of the four—or, shall I say, five—continents of the world ; and she has, in turn, given much of its first medical education to each of the great Colonies and Dependencies of Great Britain. The time has now almost arrived when she might regret, with a higher motive than that of the great Macedonian conqueror, that there are no more kingdoms over which she can extend her medical sway. It may be that the British colonies and dependencies, which now, happily, send us year after year a considerable and valuable portion of our medical students, may by-and-by cease to do so ; as older and former colonies, and even portions of the United Kingdom have previously done, when their enterprising youth have returned and taught them how to establish Universities and construct medical faculties. The time may arrive, Gentlemen from India and the Colonies, when your sons and the sons of your kinsmen will find nearer their own homes completely equipped Universities, with medical faculties,

I trust, composed largely of yourselves. But I do not recognise in these probable results the necessary disappearance of our cosmopolitan characteristic. The vast continent of Africa is still almost untouched. We are no doubt continuing our traditions by receiving increased contingents of Africanders, but there is no reason why, in a not remote future, the fame of our University should not extend with civilisation into the darkest depths. In the course of time and for a long succession of years, the prosperity of the Medical Faculty of our University may thus be materially contributed to by students who are the territorial, if not the lineal, descendants of the Masai, Wakamba, Wanyika, Fantis, Egbas, Manganja, Manyuema, and other tribes, whose names even are not at present very familiar to us.

Gentlemen, in the remarks I have made I have indicated a few of the satisfactions that you will derive from your future life, and a few of the dangers that lie before you. Our profession offers to you opportunities for the highest intellectual and moral enjoyment. It will give to each of you these satisfactions and enjoyments, however lofty or however humble a position is occupied, if only the determination is formed to obtain them. If, indeed, you should not succeed in realising all the expectations with which you enter upon your life-work, if you should not succeed in obtaining all that you desire, your truest wisdom, believe me, will be quickly to learn that there is much to be grateful for in what you have succeeded in obtaining ; for you will at least always have a noble profession, with never-failing interests and beneficent opportunities. I now most earnestly and cordially express the hope and wish that you may all fare well in your respective professional occupations.

